

This last Observation may be applied to the cooling of Liquors where no *Ice* is to be had ; for there is hardly any Place, but what has Wells: Now the Water of a Well moderately deep, wants about eight or 10 Degrees of the Cold of *Ice* ; and *Sal Ammoniac* being cool'd beforehand in the Well, will, by mixing with some of the Water of that Well, come very near to the Cold of *Ice*.

III. *An Observation of the Magnetic Needle being so affected by great Cold, that it would not traverse ; by Capt. Christopher Middleton, F. R. S.*

IN a Letter which was publish'd some Years ago in the *Philosophical Transactions*, (N^o 418.) I made Mention of a strange *Phænomenon* relating to the Sea-Compass, which I had frequently observed, when we were among the Ice in *Hudson's-Bay* ; to wit, that the magnetic Virtue of the Needle was so far lost or destroyed, that it would not traverse as usual, even when the Ship was in a considerable Motion : And in my Voyage thither last Year, I observed our Compass would not move at all, any longer than the Quarter-Master kept touching it. We had then much Snow on the Land, and many Isles of Ice around us, and the Sea not very smooth : I order'd one of the Compasses to be brought into the Cabin, but did not find it any better, till it had stood near the Fire about a Quarter of an Hour, and then it began to traverse very well ; I then order'd it to be placed in the Binnacle,

nacle, and another to be brought into the Cabin, changing them alternately thus every Half Hour, and found by this Means I could make them traverse as well as in any other Part of the World: I was obliged to continue this Practice, till we got near 100 Leagues from the Coast; but afterwards I had no Occasion for that Trouble. What should be the Cause of this wonderful *Phænomenon*, I am not able to conjecture, being certain the Compasses, as to their mechanical Structure, were very perfect, and answer'd very well both before and after, during the whole Voyage; there is never any Oil used to make them move easily, for in that Case it might often congeal, and stop the Motion of the Chard: But whether the Cold of the Climate hath a Power to deprive the Needle of its Virtue for a Time, or that the Friction is increas'd thereby to such a Degree, as it cannot be overcome by the Magnetism, I am not able to say; but the Fact is certain and surprizing. *April 20. 1738.*

IV. *Extract of a Letter from Dr. Andrew Cantwell of Montpellier, to Dr. Thomas Stack, dated June 23. 1732. concerning an uncommon Palsy of the Eye-lids.*

JUNE 7. 1732. *Monf. Guilliminet*, Counsellor of the Court of Aides, went hence to *Balleruc*, (whither I had been call'd to attend a Patient) with a Nun his Daughter, about 30 Years of Age. This Lady was troubled with as singular a Disease as I have heard of. 'Twas an intermitting periodical Palsy of